

Amendments to the Specification

Please INSERT the following paragraphs on page 9, at indicated line 13:

figure 7 shows a further example having an additional beam-shaping optical element, and free spaces between the focusing optical elements.

figures 8a - d show schematics of examples of various arrangements according to the invention having two optical fibers, aligned at obliquely inclined angles with reference to the optical axis of the collimating optical element.

figure 9 shows a further example having a fiber brancher/backward coupler connected to the first optical fiber, such that light reflected from the reflecting surface can be coupled into the first optical fiber and can impinge on the optical detector.

Please REPLACE the paragraph at page 9, indicated lines 17 – 27 with the following paragraph:

Here, light from a light source ~~(not illustrated)~~ 14 is coupled out via an optical fiber 1. A transmission grating 9 is constructed on the optical fiber 1 for irradiating the reflecting surface at the end face at which this light is coupled out and directed divergently onto a collimating optical element 2, having an optical axis 8. The parallel light beam then strikes an array arrangement 3 that is

formed from focusing optical elements 3' arranged equidistantly from one another. The light beam from each of the focusing optical elements 3' is directed in this case in the direction of a reflecting surface 4 that is a component of a pellicle 16 ~~(also not illustrated)~~, or is arranged in a fixed fashion on such a pellicle 16.

Please REPLACE the paragraph at page 9, indicated line 33 – page 10, line 3 with the following paragraph:

Because of respective reflections, the individual images are coupled into the end face of the optical fiber 5 and directed onto an optical detector ~~(not illustrated)~~ 15 connected to this optical fiber 5, when the reflecting surface 4 is arranged outside the focal point plane of the optical elements 3'. If the reflecting surface 4 is arranged in the focal point plane of the optical elements 3', the entire light is retroreflected from the reflecting surface 4 into the optical fiber 1.

Please REPLACE the paragraph at page 13, indicated lines 15 – 21 with the following paragraph:

In the case of the example of an arrangement according to the invention shown in figure 5, through holes 7 and 7' are constructed between focusing optical elements 3' that are here as a component of an array arrangement 3. As in a way not illustrated in figure 7, the focusing optical elements 3' can also be arranged at distances from one another such that free spaces remain between them.

Please INSERT the following paragraphs on page 15, at indicated line 3:

In figure 7, free spaces 10 are present between the focusing optical elements 3'. Figure 7 also illustrates an end face 11 of a first optical fiber positioned adjacent to an end face 12 of a second optical.

In each of figures 8a, 8b, 8c, and 8d optical fiber 1 is aligned at an obliquely inclined angle with reference to the optical axis 8 of the collimating optical element 2. Likewise, optical fiber 5 is aligned at an obliquely inclined angle with reference to the optical axis 8 of the collimating optical element 2.

In figure 9 a fiber brancher/backward coupler 13 is connected to the first optical fiber 1. Light from the LED or laser diode light source 14 passes through the first optical fiber 1. The light is then reflected from the reflecting surface 4 and coupled through the fiber brancher/backward coupler 13 into the first optical fiber 1 to impinge on the optical detector 15.